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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,936	02/08/2002	Isao Saito	Q68288	6574

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EXAMINER

FLORIO, KRISTINE MARIE

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,936

Applicant(s)

SAITO ET AL.

Examiner

Kristine M. Florio

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-- Th MAILING DATE of this communication appears on th cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Specification

1. The abstract of the disclosure is objected to because it is over 150 words in length, it includes the implied phrase "To provide" in line 1, and contains multiple occurrences of "said". Correction is required. See MPEP § 608.01(b).

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because of multiple occurrences of the word "(vehicle)" enclosed in parenthesis. Examiner is not sure whether applicant intends to claim a vehicle or not. Also, the word "it's" is correct only when it is a contraction for --it is--. Examiner recommends changing this word to "said" or "the". See MPEP § 608.01(b).

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4. The disclosure is objected to because of the following informalities: On page 11, lines 16-19, applicant writes (emphasis by examiner)

“As shown in FIG. 3, a **hub 17 and 17** are attached at the tip of the axle-shafts AS of left-and-right side, and **the driving wheel 14 and 14** are detachably attached to **the hub 17 and 17** using the hub bolt 18 and the hub nut 19, respectively. In the present preferred embodiment, as can be seen in FIG. 2, a **crawler track 20 is put wound** so that it might present the triangle shape in the side viewing on the condition that the driving wheel 14 is arranged at the top-most-vertices side. “

There are numerous examples of wording such as this, where applicant is apparently referring to 2 hubs, or 2 driving wheels, but does not make the terms plural or further identify them as “left” “right” “front”, “rear” or otherwise, and wording such as “is put wound” which is not clear and possibly the result of translations. This is unclear. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Appropriate correction is required.

Drawings

5. The drawings are objected to because:

Figs. 3 and 6 are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters “15” and “15c”, “12” and “12a”, “13” and “13a” have both been used to designate the same part. Examiner understands that “12”, “13” and “15” are the labels for the general bolt, nut, and driven wheel, respectively, but it is confusing to have both the general and specific labels on the figures. Applicant should delete the general labels in Figs. 3 and 6.

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A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claims 1, 3, 4, and 9 are objected to because of the following informalities: The word “(vehicle)” is enclosed in parenthesis. Examiner is not sure whether applicant intends to claim the vehicle. Based on the specification, examiner is considering the “roller” to be a compaction vehicle with a drum. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant claims in claim 1: “ a pair of driving wheels attached on both sides of a driving shaft of the crawlers, each of said driving wheels being detachable from the driving shaft”. This same terminology is used exclusively throughout the specification. However, figure 3 clearly shows only 1 driving wheel on each side of a driving shaft, for a total of 2 driving wheels, when applicant claims 2 driving wheels on each side. Examiner believes applicant intends to describe only 1 driving wheel on each side of a driving shaft, for a total of 2 driving wheels and has examined accordingly.

ONLY If applicant intends 2 driving wheels on each end of a driving shaft, for a total of 4 driving wheels per driving shaft, then the figures fail to illustrate this feature and it must be added without introducing new matter. In this case, this application is in condition for allowance except for the formal matters discussed above, and prosecution on the merits is closed in

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accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Reed et al. (US Patent 5,273,126).

Reed et al. discloses a roller (8, figure 1) equipped with a pair of crawlers (10, figure 1) on both sides of its body. The roller has a pair of driving wheels (20, figure 1) attached on both sides of a driving shaft (column 2, lines 58-60) which are detachable from the driving shaft. Sets of right-and-left driven wheels (14, 18, figure 1) for the crawlers are arranged on both sides of the roller body. A connecting member integrally supports the set of right-and-left driven wheels and is attached to a bottom of the body and is detachable from the body with the set of driven wheels attached thereto (column 2, line 61 – column 3, line 13).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Gey (US Patent 4,865,141).

Reed et al. discloses the claimed device except for the crawlers being replaceable with a pair of tires which are detachable from the driving shaft. Gey discloses that it is known in the art to provide crawler being replaceable with a pair of tires (column 1, paragraph 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Reed et al. with the crawler/tire combination of Gey, in order to have a versatile device capable of use in a variety of landscapes (i.e. sand).

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Domenighetti et al. (US Patent 5,009,546).

Reed et al. discloses the claimed device except for the driving shaft being positioned above a rotating shaft of the vibratory roll so that the body inclines with respect to the horizontal plane. Domenighetti et al. discloses that it is known in the art to provide crawler whose body inclines with respect to the horizontal plane (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Reed et al. with the body capable of inclining with respect to the horizontal plane of Domenighetti et al., in order to have a device capable of manipulation of the tools attached to the device.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Gay as applied to claim 2 above, and further in view of Domenghetti et al.

The combination of paragraph 11 above discloses the claimed device except for the driving shaft being positioned above a rotating shaft of the vibratory roll so that the body inclines with respect to the horizontal plane. Domenighetti et al. discloses that it is known in the art to provide crawler whose body inclines with respect to the horizontal plane (abstract). It would

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have been obvious to one having ordinary skill in the art at the time the invention was made to provide the combination of paragraph 11 above with the body capable of inclining with respect to the horizontal plane of Domenighetti et al., in order to have a device capable of manipulation of the tools attached to the device.

14. Claims 5 and 9 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Muro et al. (US Patent 6,123,133).

Reed et al. discloses the claimed device except for a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface. Muro et al. discloses that it is known in the art to provide a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface (column 1, paragraph 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Reed et al. with the perpendicular vibratory mechanism of Muro et al., in order to have increased pressure at one point in the surface of the ground being compacted.

15. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Gey, as applied to claim 2 above, and further in view of Muro et al.

The combination of paragraph 11 above discloses the claimed device except for a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface. Muro et al. discloses that it is known in the art to provide a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface (column 1, paragraph 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of the

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combination of paragraph 11 above with the perpendicular vibratory mechanism of Muro et al., in order to have increased pressure at one point in the surface of the ground being compacted.

16. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Domenighetti et al., as applied to claim 3 above, and further in view of Muro et al.

The combination of paragraph 12 above discloses the claimed device except for a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface. Muro et al. discloses that it is known in the art to provide a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface (column 1, paragraph 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of the combination of paragraph 12 above with the perpendicular vibratory mechanism of Muro et al., in order to have increased pressure at one point in the surface of the ground being compacted.

17. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. in view of Gay and Domenghetti et al., as applied to claim 4 above, and further in view of Muro et al.

The combination of paragraph 13 above discloses the claimed device except for a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface. Muro et al. discloses that it is known in the art to provide a perpendicularly vibratory mechanism, which vibrates the roll only in the perpendicular direction with respect to the ground surface (column 1, paragraph 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of the combination of paragraph 13 above with the perpendicular vibratory mechanism of Muro et al., in order to have increased pressure at one point in the surface of the ground being compacted.

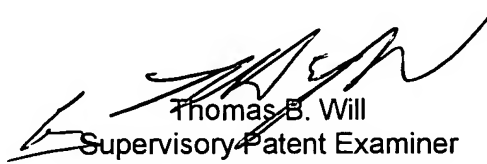
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Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristine M. Florio, whose telephone number is (703) 305-1676. The examiner can normally be reached on Mon-Fri from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703) 308-3870. The fax phone number for this Group is (703)305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

KMF
June 28, 2003